OPEN FILE REPORT 79-003 DEPARTMENT OF THE INTERIOR MONTANA PLATE 10 OF 16 GEOLOGICAL SURVEY 7.5 MINUTE SERIES (TOPOGRAPHIC) 106°45′ 106"52'30" OPEN-FILE REPORT This report has not been edited for conformity with U.S. Geological Survey editorial standards or 1.198 stratigraphic nomenclature. P 0.04 0.034 6.92 5.88 0.47 20 22 R(85%) R(85%) R(85%) 0.64 0.55 7.78 6.61 0.82 21.19 18.01 **EXPLANATION** SL RB 0.01 9.76 R (85 %) 0.01 8.30 NON-FEDERAL COAL LAND- Land for which the Federal Government does not own the coal rights. 28 26 STRIPPING-LIMIT LINE—Boundary for surface mining of the coal bed (in this quadrangle, the 500-foot overburden isopach). Arrows point toward the area R(85 %) suitable for surface mining. Recovery factor of 85 percent within that area in this quadrangle. 9.14 6.89 3.05 BOUNDARY OF COAL 5 FEET OR MORE THICK-Drawn along the outcrop of coal bed and/or the inferred contact between burned and unburned coal, and/or the 0.06 0.82 0.05 5-foot coal isopach. Arrows point toward area of coal 5 feet or more thick. 12.54 POINT OF MEASUREMENT ON COAL BED 32 T. 2 S. R (85 %) 0. 29 2.82 3.08 R (85%) 17.92 15.23 34-mile radius Point of measurement Indicated of coal bed R(85%) Hyp 6.73 10.27 8.73 11 12 10 NORTHERN CHEYENNE INDIAN RESERVATION BOUNDARY Inferred 15 18 17 16 14 13 DIAGRAM SHOWING COMPONENT AREAS OF IDENTIFIED COAL RESOURCES—Shows arcuate 21 24 23 19 20 22 boundary lines enclosing areas of measured, indicated, and inferred coal resources. Boundaries of areas are dashed where projected from an adjacent quadrangle. Areas of measured, indicated, or inferred resources may be present on this map without their outer boundaries being shown. Coal resources beyond the inferred category are hypothetical resources. (Measured resources) (Indicated resources) 15.23 (Inferred resources) 17.92 (Hypothetical resources) Hyp 0.10 IDENTIFIED AND HYPOTHETICAL COAL RESOURCES—Showing totals for Reserve Base (RB), 25 Reserves (R), and Hypothetical (HYP) resources, in 29 27 26 28 millions of short tons, for each section or part(s) of a section of Federal coal land within the stripping-limit line. Dash indicates no resources in that category. Reserve Base (RB) X the Recovery Factor (85 percent)= Reserves (R). (Measured resources) (Indicated resources) (Inferred resources) IDENTIFIED COAL RESOURCES—Showing totals for Reserve Base (RB), in millions of short tons, for each 35 33 35 34 32 36 section or part(s) of a section of Federal coal land outside 31 the stripping-limit line. Dash indicates no resources in that category. (PAINTED HILL) 106°45′ 106°52′30" Compiled in 1977 Base map from U.S. Geological Survey, 1958 NOTE: Recovery factors have not been established for underground development of coal in this quadrangle. SCALE 1:24 000 Therefore, Reserves (R) were not calculated for the coal bed in areas outside the stripping-limit line. To convert short tons to metric tons, multiply short tons by MONTANA To convert feet to meters, multiply feet by 0.3048. APPROXIMATE MEAN To convert miles to kilometers, multiply miles by 1.61. COAL RESOURCE OCCURRENCE MAP OF THE BLACK SPRING QUADRANGLE, PLATE 10

BLACK SPRING QUADRANGLE

UNITED STATES

ROSEBUD AND BIG HORN COUNTIES, MONTANA

BY

COLORADO SCHOOL OF MINES RESEARCH INSTITUTE

1979

PLATE TO

AREAL DISTRIBUTION AND TONNAGE MAP OF IDENTIFIED AND
HYPOTHETICAL RESOURCES OF THE ROSEBUD COAL BED AND

THE UPPER SPLIT OF THE ROSEBUD COAL BED